

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,083	07/25/2005	Gilles François Guichard	0508-1117	2003
466 7590 02/24/2009 YOUNG & THOMPSON			EXAMINER	
209 Madison Street			KOSAR, ANDREW D	
Suite 500 ALEXANDRI	A VA 22314		ART UNIT	PAPER NUMBER
THE STATE OF THE S	,		1654	
			MAIL DATE	DELIVERY MODE
			02/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/516.083 GUICHARD ET AL. Office Action Summary Examiner Art Unit ANDREW D. KOSAR 1654 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 19 August 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 17-32 is/are pending in the application. 4a) Of the above claim(s) 22 and 26-32 is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 17-21 and 23-25 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 30 November 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 11/30/04

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Disclosure Statement(s) (PTO/SB/08)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Art Unit: 1654

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group II and the species L4, in the reply filed on August 19, 2008 is acknowledged. The traversal is on the ground(s) that Applicant asserts that the unity of invention exists and argues the content of the teachings of Rosenberg is that the belief was that the receptors were dimeric, but later found to be trimeric, and thus Applicant asserts Rosenberg did not know the structure of the receptors, and thus could not know the structure of the ligands for the receptor. This is not found persuasive because as stated previously. Rosenberg teaches a trimeric C3

symmetry core structures instantly claimed, e.g.

(claim 21, page

23) as "a trisubstituted spacer" (line 3 claim 21). The compounds are claimed as "multimeric receptor agonists or antagonists" (e.g. lines 1 and 2 of claim 21). In contrast to Applicant's assertion, Rosenberg identifies at least TNF receptor as trimeric (e.g. claim 14, page 20; It is noted that pages 20 and 21 were absent in the copy of Rosenberg provided by Applicant. A complete copy has been placed in the file by the examiner). Rosenberg further teaches how to obtain the ligand for the receptors, including screening assays (e.g. spanning pages 12-13). Thus, Applicant's arguments have not been found persuasive, and the holding of lack of unity remains.

The requirement is still deemed proper and is therefore made FINAL.

Art Unit: 1654

Claims 22 and 26-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention/species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 19, 2008.

Applicant's elected species was found to be free of the art. The search was extended to the species of claim 23, all having the KGYY sequence, which additionally were found to be free of the art. The search was further extended as set forth below.

Allowable Subject Matter

Claim 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

In addition:

(a)The core structure:

was found to be free of the art.

(b) Multimeric structures with the sequence KGYY (SEQ ID NO:3)- were found to be free of the prior art.

Specification

The disclosure is objected to because of the following informalities:

The specification is not in compliance with 37 CFR § 1.58 (a) which states, "The specification, including the claims, may contain chemical and mathematical formulae, but

Art Unit: 1654

shall not contain drawings or flow diagrams. The description portion of the specification may contain tables, but the same tables may only be included in both the drawings and description portion of the specification if the application was filed under 35 U.S.C. 371. Claims may contain tables either if necessary to conform to 35 U.S.C. 112 or if otherwise found to be desirable."

Specifically, pages 28-30, 33, 35, 37, 39 and 40 of the instant disclosure include chemical synthetic schemes embraced by the instant rule.

As such, Applicant is required to furnish a drawing under 37 CFR § 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

Appropriate correction is required.

Claim Objections

Claims 18 and 19 are objected to because of the following informalities:

Claim 18 appears to be translated from the foreign priority documents and is grammatically confusing, and inconsistent with the English language. It is understood that D/D' is claimed to be 3-10 contiguous amino acids of the CD40L, however the claim recites additional phrases and verbiage that is unnecessary.

Claim 19 recites superscript numbers that appear to correspond to residues of the CD40L, however there is no explanation and they are unnecessary for the clarity of the claim, as the claim describes discrete peptides. Appropriate correction is required.

Art Unit: 1654

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112: The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17-21, 24 and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Factors to be considered in making the determination as to whether one skilled in the art would recognize that the applicant was in possession of the claimed invention as a whole at the time of filing include: (a) Actual reduction to practice; (b) Disclosure of drawings or structural chemical formulas; (c) Sufficient relevant identifying characteristics such as: (i) Complete structure, (ii) Partial structure, (iii) Physical and/or chemical properties or (iv) Functional characteristics when coupled with a known or disclosed correlation between function and structure; (d) Method of making the claimed invention; (e) Level of skill and knowledge in the art and (f) Predictability in the art. While all of these factors are considered, a sufficient number for a *prima facie* case are discussed below.

In the instant case, the claims are drawn to multimeric molecules corresponding to the generic formula A-X_n, where X is -D, -B-D or -B(D)-D' and n is 3-6. A is a non-protein "chemical group" which is functionalized by at least three carboxyl, amino, sulfhydryl, S-Npys or S-Pys; B is a "spacer arm" and D/D' are peptides or pseudopeptides "derived from a ligand", and are ligands for TNF superfamily.

Art Unit: 1654

Dependent claims provide ligands for human or mouse CD40 receptor, and independently provide structures of some members of the "chemical group" (e.g. claim 21) and some members of the ligand (e.g. claim 19).

In looking to the specification, Applicant has reduced to practice only species having the peptide sequence KGYY coupled through the C-terminal Y carboxyl group. Further, Applicant provides only CD40 receptor ligands (e.g. claim 19), and provides no other representative species for any other receptor. With regards to the spacer arm, Applicant has only shown only an \(\epsilon\)-amino acid linker (\(\epsilon\)-alanine), e.g. claim 23, and in the specification defines "spacer arm" as "an organic chain used to move the D-group to the desired distance from A" (page 3). Additionally, with regards to A, the "chemical group", the specification provides several species contemplated, e.g. claim 23 and reduced to practice.

However, the vast breadth of the claims is insufficiently supported by the number of examples present in the specification. Description of the CD40 ligands, being few in number, is not descriptive of all CD40 ligands, nor is it descriptive of any other TNF superfamily receptor ligand. Further, exemplification of a single spacer arm, coupled with a nebulous definition of the spacer arm, is insufficient to describe the genus of spacer arms embraced by the claims. Additionally, the core molecule, A, is insufficiently described by the specification for the breadth it embraces and the thirteen species of the disclosure are insufficient to describe the myriad of possible structures. Further, the claims embrace pseudopeptides, for which there are no examples. The claims embrace all non-proteins with at least three (and up to 6) functional groups as the core structure, however the examples in the specification are so few in number and the claims embrace

Art Unit: 1654

virtually all organic and inorganic structures that are not proteins. It should be noted that 'not protein' does not *per se* exclude peptides, as is evident from the (ε-lysine)₄-Ala and evelopeptide species of claim 23.

Additionally, the claims embrace the ligands which are fragments of the defined ligands or hybrids of at least two consecutive amino acids of the peptides (e.g. claim 19), However, there is no correlation between structure/function, and there is no exemplification of the resultant peptides or fragments, nor is there any *a priori* knowledge that they would have the requisite function.

Further, the ligand, D, is described by functional properties- "capable of interacting with the receptor", as is the "spacer arm", B, however as described above, the CD40 ligand fragments are insufficient to describe the genus of ligands, and there is no disclosure of a critical structural element that would be required for the function of 'interacting', nor is there a disclosed requisite structure for the 'spacer arm' beyond being organic. The specification provides that members of the TNF superfamily are structurally or functionally similar to TNF. However, the degree of similarity in either function, or structure, of the receptor is undefined. While general synthetic techniques are within the grasp of the artisan, one could know which compounds to synthesize that are the multimeric molecules with the requisite function as instantly claimed.

The MPEP states that the purpose of the written description requirement is to ensure that the inventor had possession, as of the filing date of the application, of the specific subject matter later claimed by him. For a broad generic claim, the specification must provide adequate written description to identify the genus of the claim. In Regents of the University of California v. Eli Lilly & Co. the court stated that, "A written

Art Unit: 1654

description of an invention involving a chemical genus, like a description of a chemical species, 'requires a precise definition, such as by structure, formula, [or] chemical name,' of the claimed subject matter sufficient to distinguish it from other materials." Fiers, 984 F.2d at 1171, 25 USPQ2d 1601; In re Smythe, 480 F.2d 1376, 1383, 178 USPQ 279, 284985 (CCPA 1973) ("In other cases, particularly but not necessarily, chemical cases, where there is unpredictability in performance of certain species or subcombinations other than those specifically enumerated, one skilled in the art may be found not to have been placed in possession of a genus ...") Regents of the University of California v. Eli Lilly & Co., 43 USPO2d 1398. While the MPEP does not define what constitute a sufficient number of representative species, the courts have indicated what do not constitute a representative number of species to adequately describe a broad generic. In Gostelli, the courts determined that the disclosure of two chemical compounds within a subgenus did not describe that subgenus. In re Gostelli, 872, F.2d at 1012, 10 USPQ2d at 1618. Here, as discussed above, 13 compounds does not adequately describe the breadth of the genus claimed.

The description requirement of the patent statue requires a description of an invention, not an indication of a result that one might achieve if one made that invention. See *In re Wilder*, 736, F.2d 1516, 1521, 222 USPQ 369, 372-73 (Fed. Cir. 1984) (affirming rejection because the specification does "little more than outlin[e] goals appellants hope the claimed invention achieves and the problems the invention will hopefully ameliorate.") Accordingly, it is deemed that the specification fails to provide adequate written description for the genus of the claims and does not reasonably convey

Art Unit: 1654

to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the entire scope of the claimed invention.

Claim 25 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The factors to be considered in determining whether a disclosure meets the enablement requirements of 35 U.S.C. 112, first paragraph, have been described in In re Wands, 858 F.2d 731, 8 USPO2d 1400 (Fed. Cir., 1988). The court in Wands states, "Enablement is not precluded by the necessity for some experimentation, such as routine screening. However, experimentation needed to practice the invention must not be undue experimentation. The key word is 'undue', not 'experimentation'" (Wands, 8 USPQ2sd 1404). Clearly, enablement of a claimed invention cannot be predicated on the basis of quantity of experimentation required to make or use the invention. "Whether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations" (Wands, 8 USPO2d 1404). Among these factors are: (1) the nature of the invention; (2) the breadth of the claims; (3) the state of the prior art; (4) the predictability or unpredictability of the art; (5) the relative skill of those in the art; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary. While all of these factors are considered, a sufficient amount for a prima facie case is discussed below.

Art Unit: 1654

(1) The nature of the invention and (2) the breadth of the claims:

The claims are drawn to a vaccine composition where the active agent is the multimeric compound. The claim does not define what one is vaccinating against, and is non-limiting to this function.

(3) The state of the prior art and (4) the predictability or unpredictability of the art:

Vaccines are developed through extensive trial and error research and experimentation at the preclinical stage. The CDC (VACCINE DEVELOPMENT AND TESTING, accessed at http://www.hhs.gov/nvpo/factsheets/fs_tableII_doc1.htm, 4 pages, last updated 8/2001) teaches that, "To develop a candidate vaccine, scientists first test preparations in cell-culture or tissue-culture systems. If initial results are promising, the candidates are further tested in laboratory animals such as mice, guinea pigs or even monkeys. In some cases, computers can help researchers visualize the vaccine candidates in three dimensions to predict how vaccines will interact with the immune system. If the vaccine candidate performs well throughout these preclinical evaluations, it can become an investigational vaccine for use in human volunteers in clinical trials." (page 2).

(5) The relative skill of those in the art:

In light of the teachings of the CDC, the relative skill in the art is low with regards to having preconceived knowledge as to what candidate vaccine will progress to clinical studies, or be considered as a vaccine. Further, in light of the claims, the skill is low, as the claim is absent what one is vaccinating against.

Art Unit: 1654

(6) The amount of direction or guidance presented and (7) the presence or absence of working examples:

The specification has provided guidance for pharmaceutical compositions comprising the compounds, however the specification does not provide for making vaccines for any purpose where the multimeric compound is the active agent of the vaccine.

(8) The quantity of experimentation necessary:

Considering the state of the art as discussed by the references above, particularly with regards to vaccine development and the high unpredictability in the art as evidenced therein, and the lack of guidance provided in the specification, one of ordinary skill in the art would be burdened with undue experimentation to practice the invention commensurate in the scope of the claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17-21 and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites "D and D' represent peptides or pseudopeptides...", however it is unclear if each D and D' represents a plurality of peptides/pseudopeptides, or if Applicant intended D and D' individually are a peptide or pseudopeptide (the singular).

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection

Art Unit: 1654

desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

Here, claim 17 recites the broad recitation 'ligand of receptors of the TNF superfamily', and the claim also recites 'and in particular...' which is the narrower statement of the range/limitation.

Additionally, claim 19 recites the broad recitation 'or from hybrid peptide...', and the claim also recites 'and in particular...' which is the narrower statement of the range/limitation.

Claim 17 recites that A is a "chemical group", however a chemical group is understood by the artisan, a chemist, to be a column of the periodic table, e.g. Group VIIa are the halogens. Further, it is unclear how A can be a 'group' which is a collection, rather than 'a molecule', or 'a moiety'.

Claim 19 recites, "or from fragment of the abovementioned sequences", however it is unclear if the 'fragments' are of the 'hybrids', e.g. SEQ ID NO:22 or 23, or of the peptides, e.g. SEQ ID NO:1-21, or both.

Art Unit: 1654

Claim 21 recites that A is, in one option, a C3 symmetry molecule, however

compounds VIb and VIc:

axis, but a C_1 , because the core structure is not 3-proline, or proline-like compounds, arranged in the same manner. Two of the pyrrole nitrogens face each other. Thus, there is no symmetry-regardless of the ligand positioning. Thus, it is unclear if Applicant intended a cyclic tri-proline core (or the β -proline core), or whether Applicant defines C_3 symmetry in an unconventional manner.

Claims 21 and 23 lack clear antecedent basis. Claim 17 recites "a chemical group", however the macromolecules, e.g. the cyclcopeptides, the (\varepsilon-Lys)_4Ala, etc. are not a 'chemical group', but macromolecules.

Claim 23 recites in line 2 and 3 YYGK and SEQ ID NO:4, however there are no occurrences of SEQ ID NO:4 in the claim. Thus, it is unclear whether Applicant intended one or more, of the sequences attached to the core structure to be in the YYGK orientation

Claim 24 recites, "pharmaceutically acceptable vector," however it is unclear what is meant by 'vector' within the scope of the claim. A vector is understood in the art to be an animal, e.g. a dog, or a parasite, e.g. malaria, that carries a disease between hosts, or a plasmid or bacteriophage for carrying DNA into a host cell. Here it appears

Applicant is describing a carrier, e.g. saline, as the claim is drawn to a pharmaceutical

Art Unit: 1654

composition, whereas the vaccinal composition comprises an adjuvant, which is a standard component of a vaccine composition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless— (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 20, 21, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by ROSENBERG (WO 99/52877 A1; IDS 11/30/04).

Rosenberg teaches a trimeric C3 symmetry core structure, e.g.

(claim 21, page 23) as "a trisubstituted spacer" (line 3 claim 21)

to which ligands are bound. The compounds are claimed as "multimeric receptor agonists or antagonists" (e.g. lines 1 and 2 of claim 21). Rosenberg identifies TNF receptor as trimeric (e.g. claim 14, page 20; page 3, lines 24-26). Rosenberg further teaches that the core structure can be of the formula Q-[Ra-Z]₃ where Q is nitrogen (e.g. page 7, specification, formula II) amongst other possibilities to create a trimeric core.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or

Art Unit: 1654

would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 17-21, 24 and 25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 11/721,910. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds and compositions of '910 anticipate the instant compounds, e.g. the compounds of claims 13 and 14 of '910.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 17-21, 24 and 25 are directed to an invention not patentably distinct from claims 1-20 of commonly assigned 11/721,910 for the reasons set forth above. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 11/721,910, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for

Art Unit: 1654

the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW D. KOSAR whose telephone number is (571)272-0913. The examiner can normally be reached on Monday - Friday 08:00 - 16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia J. Tsang can be reached on (571)272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/516,083 Page 17

Art Unit: 1654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call

/Andrew D Kosar/ Primary Examiner, Art Unit 1654

800-786-9199 (IN USA OR CANADA) or 571-272-1000.